

INTERNATIONAL SEARCH REPORT

PCT/NL2004/000627

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12P19/04 A61K39/02 A61K39/102 A61K47/48

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12P A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, MEDLINE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 220 717 A (KUO JOSEPH S-C) 2 September 1980 (1980-09-02) cited in the application the whole document -----	1-5
X	EP 0 024 493 A (AMERICAN CYANAMID CO) 11 March 1981 (1981-03-11) the whole document -----	1,3
X	US 5 192 540 A (BRISTOL JAMES E ET AL) 9 March 1993 (1993-03-09) cited in the application the whole document -----	10-17
X	US 4 644 059 A (GORDON LANCE K) 17 February 1987 (1987-02-17) cited in the application the whole document -----	17
	-/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "Z" document member of the same patent family

Date of the actual completion of the international search

19 January 2005

Date of mailing of the international search report

13. 10. 2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>PEETERS CARLA C A M ET AL: "Preparation of polysaccharide-conjugate vaccines." METHODS IN MOLECULAR MEDICINE. 2003, vol. 87, August 2003 (2003-08), pages 153-174, XP001204262 ISSN: 1543-1894 the whole document</p>	10-17
A	<p>MERRITT J ET AL: "Development and scale-up of a fed-batch process for the production of capsular polysaccharide from Haemophilus influenzae" JOURNAL OF BIOTECHNOLOGY, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 81, no. 2-3, 25 August 2000 (2000-08-25), pages 189-197, XP004210490 ISSN: 0168-1656 the whole document</p>	1-5

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-5, 10-16

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: Claims 1-5, 10-16

A method of producing a capsular polysaccharide from an encapsulated bacterium, and a method for producing a polysaccharide conjugate.

Invention 2: Claims 6-9

Method of recovering a polysaccharide from a fermentation broth.

Invention 3: Claim 17

Pharmaceutical composition comprising a conjugate comprising a capsular polysacchride and a protein.

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4220717	A	02-09-1980	AT 363592 B AT 766178 A PH 15958 A ZA 7804803 A	10-08-1981 15-01-1981 04-05-1983 29-08-1979
EP 0024493	A	11-03-1981	AR 228430 A1 AU 534274 B2 AU 6038580 A CA 1146862 A1 DE 3070753 D1 ES 8104403 A1 JP 56029524 A US 4242501 A	15-03-1983 12-01-1984 12-02-1981 24-05-1983 18-07-1985 01-07-1981 24-03-1981 30-12-1980
US 5192540	A	09-03-1993	NONE	
US 4644059	A	17-02-1987	NONE	